

STATEMENT OF BASIS (AI No. 159908)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0124770 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Multi-Chem Group, LLC
Haughton Facility
6491 Highway 157
Haughton, LA 71037

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Yvonne Baker

DATE PREPARED: December 15, 2009

1. PERMIT STATUS**A. Reason For Permit Action:**

Issuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. NPDES permit – NPDES permit effective date: N/A
NPDES permit expiration date: N/A
EPA has not retained enforcement authority.

C. LPDES permits –
LPDES permit effective date: N/A
LPDES permit expiration date: N/A

D. Date Application Received: January 21, 2009

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - oilfield chemical distribution warehouse**

The facility stores chemicals in bulk tanks, totes and drums within concrete secondary containment. All chemical transfer is conducted within secondary containment. Secondary containment is 113' X 37' concrete pad with sumps that is capable of containing approximately 22,920 gallons. The facility uses a reverse osmosis unit to treat water used in the dilution of chemicals. The discharges from this facility consist of industrial stormwater runoff and reverse osmosis reject water.

All solid and liquid waste is disposed of through an approved regulated facility.

The facility utilizes a mechanical treatment plant with chlorination and effluent reduction for the sanitary wastewater generated at the facility.

Statement of Basis for
Multi-Chem Group, LLC, Houghton Facility
LA0124770, AI No. 159908
Page 2

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II
3. Wastewater Type: III
4. SIC code: 4226 and 5169

C. LOCATION - 6491 Highway 157 in Houghton, Bossier Parish
Latitude 32° 29' 12", Longitude 93° 30' 35"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: industrial stormwater runoff from the bulk tank storage area and previously monitored reverse osmosis reject water

Treatment: None

Location: at the point of discharge from the pipe located on the northeast side of the property

Flow: intermittent

Discharge Route: via pipe and Highway 157 roadside ditch to local drainage thence into Foxskin Bayou

Outfall 101

Discharge Type: reverse osmosis reject water

Treatment: None

Location: at the point of discharge from the reverse osmosis unit prior to mixing with other waters

Flow: 2100 GPD

Discharge Route: to Outfall 001

Outfall 002

Discharge Type: industrial stormwater runoff from the bulk tank storage area and the tote/drum storage area

Treatment: None

Location: at the point of discharge from the pipe located on the northwest side of the property

Flow: Intermittent

Discharge Route: via pipe and Highway 157 roadside ditch to local drainage thence into Foxskin Bayou

4. RECEIVING WATERS

STREAM - via pipe and Highway 157 roadside ditch to local drainage thence into Foxskin Bayou

BASIN AND SEGMENT - Red River Basin, Segment 100502

DESIGNATED USES -
a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
f. agriculture

Statement of Basis for
Multi-Chem Group, LLC, Haughton Facility
LA0124770, AI No. 159908
Page 3

5. TMDL STATUS

Subsegment 100502, Lake Bistineau, is listed on LDEQ's Final 2006 303(d) List as impaired for mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Red River Basin, those suspected causes for impairment which are not directly attributed to the oilfield chemical distribution warehouse point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

The mercury impairment has been attributed to atmospheric deposition. The industrial stormwater runoff and reverse osmosis reject water discharge from this facility has little or no potential to cause or contribute to the mercury impairment. However, a mercury limit has been established in the permit should the facility store any chemical containing mercury. Additionally, a stormwater pollution prevention plan with best management practice has been established in the permit.

6. CHANGES FROM PREVIOUS PERMIT

N/A; initial permit.

7. COMPLIANCE HISTORY/COMMENTS

A. OEC – An inspection on August 4, 2008 noted the following:

- 1) totes with product on yard without containment;
- 2) totes have a separate storage area with block walls and floor drains that go to holding area;
- 3) doorway to storage area does not have a means of containment;
- 4) totes are stored too high with potential to be knocked over wall;
- 5) product transfer conducted under roof in back of building; area goes to floor drains;
- 6) product transfer also at containment for tanks;
- 7) SPCC plan unavailable;
- 8) no water discharge permit;
- 9) osmosis water discharged by system to holding tank.

B. DMR Review/Excursions – N/A; no DMRs on file; initial permit.

8. EXISTING EFFLUENT LIMITS

N/A; initial permit.

Statement of Basis for
Multi-Chem Group, LLC, Haughton Facility
LA0124770, AI No. 159908
Page 4

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 100502 of the Red River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

DEQ has not received any comments from SHPO. Therefore, in accordance with the "Memorandum of Understanding (MOU) for the Protection of Historic Properties in Louisiana Regarding LPDES Permits," if no comments are received by LDEQ within the 30-day comment period, the LDEQ may consider that the SHPO has waived the right to provide comments, and the LDEQ may proceed with the permitting action.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Statement of Basis for
Multi-Chem Group, LLC, Haughton Facility
LA0124770, AI No. 159908
Page 5

Rationale for Multi-Chem Group, LLC

1. **Outfall 001** - industrial stormwater runoff from the bulk tank storage area and previously monitored reverse osmosis reject water (estimated flow is intermittent)
Outfall 002 - industrial stormwater runoff from the bulk tank storage area and the tote/drum storage area (estimated flow is intermittent)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
Flow-MGD	Report	Report	*; BPJ
TOC	---	50 mg/L	*; BPJ
Oil & Grease	---	15 mg/L	*; BPJ
Total BTEX ¹	---	250 ug/L	BPJ
pH	6.0 su	9.0 su	*; BPJ
METALS, CYANIDE, TOTAL PHENOLS			
Antimony ³	---	600 ug/L	BPJ
Arsenic ³	---	100 ug/L	BPJ
Beryllium ³	---	100 ug/L	BPJ
Cadmium ³	---	100 ug/L	BPJ
Chromium ³	---	150 ug/L	BPJ
Copper ³	---	500 ug/L	BPJ
Lead ^{1,3}	---	150 ug/L	BPJ
Mercury ³	---	10 ug/L	BPJ
Nickel ³	---	500 ug/L	BPJ
Selenium ³	---	100 ug/L	BPJ
Silver ³	---	100 ug/L	BPJ
Thallium ³	---	100 ug/L	BPJ
Zinc ³	---	1000 ug/L	BPJ
Total Cyanide ³	---	100 ug/L	BPJ
Total Phenols ²	---	500 ug/L	BPJ
VOLATILE COMPOUNDS			
Acrolein ³	---	100 ug/L	BPJ
Acrylonitrile ³	---	100 ug/L	BPJ
Benzene ^{1,3}	---	100 ug/L	BPJ
Bromoform ³	---	100 ug/L	BPJ
Carbon Tetrachloride ³	---	100 ug/L	BPJ
Chlorobenzene ³	---	100 ug/L	BPJ
Chlorodibromomethane ³	---	100 ug/L	BPJ
Chloroethane ³	---	100 ug/L	BPJ
2-Chloroethyl Vinyl Ether ³	---	100 ug/L	BPJ
Chloroform ³	---	100 ug/L	BPJ
Dichlorobromomethane ³	---	100 ug/L	BPJ
1,2-Dichlorobenzene ³	---	100 ug/L	BPJ
1,3-Dichlorobenzene ³	---	100 ug/L	BPJ
1,4-Dichlorobenzene ³	---	100 ug/L	BPJ

Statement of Basis for
Multi-Chem Group, LLC, Haughton Facility
LA0124770, AI No. 159908
Page 6

1,1-Dichloroethane ³	---	100 ug/L	BPJ
1,2-Dichloroethane ³	---	100 ug/L	BPJ
1,1-Dichloroethylene ³	---	100 ug/L	BPJ
1,2-Dichloropropane ³	---	100 ug/L	BPJ
1,3-Dichloropropylene ³	---	100 ug/L	BPJ
Ethylbenzene ³	---	100 ug/L	BPJ
Methyl Bromide ³	---	100 ug/L	BPJ
Methyl Chloride ³	---	100 ug/L	BPJ
Methylene Chloride ³	---	100 ug/L	BPJ
1,1,2,2-Tetra-Chloroethane ³	---	100 ug/L	BPJ
Tetrachloroethylene ³	---	100 ug/L	BPJ
Toluene ³	---	100 ug/L	BPJ
1-2-Trans-Dichloroethylene ³	---	100 ug/L	BPJ
1,1,1-Trichloroethane ³	---	100 ug/L	BPJ
1,1,2-Trichloroethane ³	---	100 ug/L	BPJ
Trichloroethylene ³	---	100 ug/L	BPJ
Vinyl Chloride ³	---	100 ug/L	BPJ
ACID COMPOUNDS			
Phenol ³	---	100 ug/L	BPJ
2-Nitrophenol ³	---	100 ug/L	BPJ
4-Nitrophenol ³	---	100 ug/L	BPJ
2,4-Dinitrophenol ³	---	100 ug/L	BPJ
4,6-Dinitro-o-Cresol ³	---	100 ug/L	BPJ
P-Chloro-M-Cresol ³	---	100 ug/L	BPJ
Pentachlorophenol ³	---	100 ug/L	BPJ
2-chlorophenol ³	---	100 ug/L	BPJ
2,4-Dichlorophenol ³	---	100 ug/L	BPJ
2,4,6-Trichlorophenol ³	---	100 ug/L	BPJ
2,4-Dimethylphenol ³	---	100 ug/L	BPJ
BASE/NEUTRAL COMPOUNDS			
1,2-Diphenylhydrazine ³	---	100 ug/L	BPJ
1,2,4-Trichlorobenzene ³	---	100 ug/L	BPJ
2-Chloronaphthalene ³	---	100 ug/L	BPJ
2,4-Dinitrotoluene ³	---	100 ug/L	BPJ
2,6-Dinitrotoluene ³	---	100 ug/L	BPJ
3,3'-Dichlorobenzidine ³	---	100 ug/L	BPJ
3,4-Benzofluoranthene ³	---	100 ug/L	BPJ
4-Bromophenyl Phenyl Ether ³	---	100 ug/L	BPJ
4-Chlorophenyl Phenyl Ether ³	---	100 ug/L	BPJ
Acenaphthene ³	---	100 ug/L	BPJ
Acenaphthylene ³	---	100 ug/L	BPJ
Anthracene ³	---	100 ug/L	BPJ
Benzidine ³	---	100 ug/L	BPJ
Benzo (a) Anthracene ³	---	100 ug/L	BPJ

Statement of Basis for
Multi-Chem Group, LLC, Haughton Facility
LA0124770, AI No. 159908
Page 7

Benzo (a) Pyrene ³	---	100 ug/L	BPJ
Benzo, (g,h,i) Perylene ³	---	100 ug/L	BPJ
Benzo (k) Fluoranthene ³	---	100 ug/L	BPJ
Bis (2-Chloroethoxy) Methane ³	---	100 ug/L	BPJ
Bis (2-Chloroethyl) Ether ³	---	100 ug/L	BPJ
Bis (2-Chloroisopropyl) Ether ³	---	100 ug/L	BPJ
Bis (2-Ethylhexyl) Phthalate ³	---	100 ug/L	BPJ
Butyl Benzyl Phthalate ³	---	100 ug/L	BPJ
Chrysene ³	---	100 ug/L	BPJ
Dibenzo (a,h) Anthracene ³	---	100 ug/L	BPJ
Diethyl Phthalate ³	---	100 ug/L	BPJ
Dimethyl Phthalate ³	---	100 ug/L	BPJ
Di-N-Butyl Phthalate ³	---	100 ug/L	BPJ
Di-N-Octyl Phthalate ³	---	100 ug/L	BPJ
Fluoranthene ³	---	100 ug/L	BPJ
Fluorene ³	---	100 ug/L	BPJ
Hexachlorobenzene ³	---	100 ug/L	BPJ
Hexachlorobutadiene ³	---	100 ug/L	BPJ
Hexachlorocyclopentadiene ³	---	100 ug/L	BPJ
Hexachloroethane ³	---	100 ug/L	BPJ
Ideno (1,2,3-c,d) Pyrene ³	---	100 ug/L	BPJ
Isophorone ³	---	100 ug/L	BPJ
Naphthalene ³	---	100 ug/L	BPJ
Nitrobenzene ³	---	100 ug/L	BPJ
N-Nitrosodimethylamine ³	---	100 ug/L	BPJ
N-Nitrosodi-n-propylamine ³	---	100 ug/L	BPJ
N-Nitrosodiphenylamine ³	---	100 ug/L	BPJ
Phenanthrene ³	---	100 ug/L	BPJ
Pyrene ³	---	100 ug/L	BPJ
PESTICIDES/HERBICIDES:			
Alpha-Endosulfan ³	---	10 ug/L	BPJ
Beta-Endosulfan ³	---	10 ug/L	BPJ
Endosulfan Sulfate ³	---	10 ug/L	BPJ
Aldrin ³	---	10 ug/L	BPJ
Alpha-BHC ³	---	10 ug/L	BPJ
Beta-BHC ³	---	10 ug/L	BPJ
Gamma-BHC ³	---	10 ug/L	BPJ
Delta-BHC ³	---	10 ug/L	BPJ
Dieldrin ³	---	10 ug/L	BPJ
4,4'-DDE ³	---	10 ug/L	BPJ
4,4'-DDD ³	---	10 ug/L	BPJ
4,4'-DDT ³	---	10 ug/L	BPJ
Heptachlor ³	---	10 ug/L	BPJ
Endrin Aldehyde ³	---	10 ug/L	BPJ
Heptachlor Epoxide ³	---	10 ug/L	BPJ

Statement of Basis for
Multi-Chem Group, LLC, Haughton Facility
LA0124770, AI No. 159908
Page 8

Chlordane ³	---	10 ug/L	BPJ
Toxaphene ³	---	10 ug/L	BPJ
PCB-1242 ³	---	⁴	BPJ
PCB-1254 ³	---	⁴	BPJ
PCB-1221 ³	---	⁴	BPJ
PCB-1232 ³	---	⁴	BPJ
PCB-1248 ³	---	⁴	BPJ
PCB-1260 ³	---	⁴	BPJ
PCB-1016 ³	---	⁴	BPJ
2,3,7,8-TCDD (Dioxin) ²	---	5ug/L	BPJ
Endrin ³	---	5ug/L	BPJ

BPJ Best Professional Judgement

su Standard Units

* LDEQ's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)

1. This parameter shall be monitored if the outfall could potentially be affected by the handling and/or storage of commodities containing liquid or gaseous hydrocarbons.
2. This parameter shall be monitored if the outfall could potentially be affected by the handling and/or storage of commodities containing any phenolic compound.
3. This parameter shall be monitored if the outfall could potentially be affected by the handling and/or storage of commodities containing this parameter.
4. There shall be no discharge of polychlorinated biphenyls (PCBs).

Treatment: none

Monitoring Frequency: flow, TOC, oil and grease, and pH shall be monitored monthly.

All other parameters must be monitored once during each month in which the outfall could potentially be affected by handling and/or storing commodities containing one or more of the specified chemicals, and once a month for two months thereafter (e.g., if a commodity containing one or more of the specified chemicals is handled and/or stored within the tank farm, the specified parameter must be monitored at the outfall for the respective tank farm once during each month in which the specified chemical is handled and/or stored within that tank farm, and monitoring shall continue once per month for two months after the commodity is no longer handled and/or stored within that tank farm). If the effluent limitation is exceeded during either of these two additional months, then monitoring shall continue once per month until the limit is met for two consecutive months at which time monitoring for the specified parameter shall cease.

Statement of Basis for
Multi-Chem Group, LLC, Haughton Facility
LA0124770, AI No. 159908
Page 9

Limits Justification: flow, TOC, oil and grease, and pH limits are based on the previous permit and on LDEQ's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).

The Total Phenols parameter is included in the permit based on BPJ because the facility may handle and/or store commodities that contain phenolic compounds, and there is potential for leaks and spills during the transfer of the products. The effluent limit is based on current LDEQ practices.

All other parameters are included in the permit based on BPJ because of the potential for the facility to handle and/or store commodities containing metals, volatile compounds, acid compounds, base/neutral compounds and pesticides/herbicides, and because there is potential for leaks and spills during the transfer of the products. The effluent limitations are based on state empirical limitations and are consistent with current LDEQ practices for permitting stormwater with potential to discharge these types of pollutants.

This facility is not subject to Effluent Limitations Guidelines for Transportation Equipment Cleaning, 40 CFR Part 442, because, in accordance with 40 CFR 442.1.a, "this part applies to discharges resulting from cleaning the interior of tanks used to transport chemical, petroleum or food grade cargos" and 40 CFR 442.1.b, "This part is not applicable to... wastewaters resulting from cleaning the interiors of drums, intermediate bulk containers, or closed top hoppers." This facility does not clean tanks used to transport cargo.

2. **Outfall 101 – Reverse Osmosis Reject Water (estimated flow is 2100 GPD)**

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	mg/L		
Flow	Report	Report	
TSS	30	45	Similar discharges*, LAG380000 (BPJ)
Clarifying Agents Used	Inventory Record	---	Similar discharges*, LAG380000 (BPJ)

Treatment: None

Monitoring Frequency: quarterly for flow and TSS at the point of discharge from the reverse osmosis unit prior to mixing with other waters. Clarifying Agents Used: document in a quarterly inventory record the quantity and type of any clarifying agent used during each calendar month.

Limits Justification: Limits and monitoring frequencies are based on current guidance for similar discharges from other facilities and the Potable Water Treatment Plant General Permit, LAG380000 effective September 1, 2007.

* Existing permits for similar outfalls
BPJ Best Professional Judgement
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

Statement of Basis for
Multi-Chem Group, LLC, Houghton Facility
LA0124770, AI No. 159908
Page 10

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because there is a potential for storm water contamination from the loading and unloading of chemicals.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Part II, Paragraph M of the Draft Permit).